



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,978	03/16/2004	Benjamin Clay Moise II	C04039US (98238.1C2)	2502
22920	7590	11/30/2004	EXAMINER	
GARVEY SMITH NEHRBASS & DOODY, LLC THREE LAKEWAY CENTER 3838 NORTH CAUSEWAY BLVD., SUITE 3290 METAIRIE, LA 70002			WRIGHT, ANDREW D	
			ART UNIT	PAPER NUMBER
			3617	

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/801,978	MOISE ET AL.	
	Examiner	Art Unit	
	Andrew Wright	3617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 39-47, 58-65, 67, 68 and 70 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 68 and 70 is/are allowed.
- 6) ☒ Claim(s) 39-47, 58-65 and 67 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>6/14/04</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Objections

1. Claim 39 is objected to. Claim 39 recites "a vertically extending opening" in lines 11-12. The recitation should be "one of the vertically extending openings." Claim 39 recites "the side openings" in line 16. The recitation should be "the vertically extending opening". Claim 39 recites "each port and starboard pad" in lines 16-17. Port and starboard pads have not been recited. It will be assumed that this refers to the pads respectively attached to the port leg and starboard leg. Appropriate correction is required.
2. Claim 43 is objected to. Applicant is advised that should claim 41 be found allowable, claim 43 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).
3. Claim 58 is objected to. Claim 58 recites "a vertically extending opening" in lines 12-13. The recitation should be "one of the vertically extending openings." Claim 58 recites "the side openings" in line 17. The recitation should be "the vertically extending opening". Claim 58 recites "each port and starboard pad" in lines 17-18. Port and starboard pads have not been recited. It will be assumed that this refers to the pads respectively attached to the port leg and starboard leg. Appropriate correction is required.

4. Claim 68 is objected to. Claim 68 recites "an aft pad leg" in line 9. The recitation should be "an aft leg pad". Claim 68 recites "the forward legs" in line 9. The recitation should be "the forward leg pads". Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 39, 41, and 43-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crake (US 2,334,992) in view of Moore et al. (US 3,628,336) and White (US 5,188,484). Regarding claim 39, Crake discloses a barge-type drilling platform. The vessel comprises a hull having a bow, stern, port side panel, starboard side panel, and periphery. Each side panel has a vertically extending opening at recess (17). The vessel comprises a plurality of legs (16) that are attached to the hull and vertically moveable relative to the hull. Each leg has a pad (15) attached thereto. Each leg has a hydraulic jacking mechanism (19) that creates the vertical movement. There are two legs next to the bow and two legs closer to the stern. The hull has recesses (17) that the pads are disposed in when the legs are lifted to the uppermost position. Crake shows one embodiment, figure 7, where the pads extend laterally beyond the hull perimeter through the vertical opening of recess (17). Each recess has a front opening that is located in a plane coincident with the bottom of the hull near the forward most

end of the recess. This front opening can communicate with the vertical side opening. Crake does not disclose that the vessel is self propelled. Moore shows a drilling platform similar to that of Crake. The platform is used for offshore drilling and has vertically extendable legs attached to the hull with a pad attached to each leg. Moore, however, shows that the drilling platform can be equipped with a propeller. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Crake by providing the vessel with a propeller. The motivation would be to allow the vessel to be self-propelled thereby eliminating the need for an extra vessel to tow the drilling vessel.

7. Still regarding claim 39, Crake shows one pair of legs next to one end of the barge (the right end of the barge as shown in figures 1-3), while the other pair is closer to the center of the barge. White shows a drilling platform similar to that of Crake. The platform is used for offshore drilling and has vertically extendable legs attached to the hull with a pad attached to each leg. White, however, shows that the legs are arranged such that two legs are next to the stern. The precise location of the aft legs is not assigned any criticality in either Crake or White, and Crake suggests that the legs may be moved for the purpose of optimizing deck space (see figure 7). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Crake by moving the aft legs closer to the stern. The motivation would be to optimize deck space. Crake does not disclose which end of the barge is the bow and which is the stern; but Crake as modified in view of White would have legs next to both the bow and stern.

8. Regarding claims 41 and 43, it can be seen from the figures of Crake that each pad is roughly the same size.

9. Regarding claim 45, Crake shows the pads are below the waterline when in the uppermost position.

10. Regarding claims 44, 46, and 47, Crake discloses that the pads are buoyant. As such, they will necessarily contribute to the aggregate buoyancy of the hull when in the recessed position. It is known to use this type of vessel in salt water, and therefore would be obvious to make the pads buoyant in salt water.

11. Claims 40 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crake in view of Moore and White as applied to claim 39 above, and further in view of Buckley et al. (US 2,308,743) and Nunley (US 5,190,410). Regarding claim 40, Crake discloses a pad size such that the total surface area of the pads is less than 30% of the deck area. Bulkley discloses a different total pad surface area that is also less than 30% of the deck area. Bulkley teaches in lines 39-42 that the pad size may be increased in accordance with the load to be supported. It is well known in the art to have pads of all sizes, ranging from a spike-ended spud to a pad that is larger than the deck area as shown by Nunley. Based upon the teaching of Bulkley and the disclosure of Nunley, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the vessel of Crake by making the pads of a size such that the total pad surface area was greater than 30% of the deck area. The motivation would be to construct the pads in accordance with an anticipated load that would require more support area.

12. Regarding claim 42, from the teaching of Bulkley, one skilled in the art would be motivated to size the pads in accordance with the load to be supported. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the vessel of Crake by making the pads of a size such that the pads exert a pressure of less than 7 p.s.i. on the sea floor. The motivation would be to construct the pads to optimize design parameters such as strength-to-weight ratio of the legs and pads and size of the pads.

13. Claims 58, 60, 62, 63, 65, and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crake (US 2,334,992) in view of Gunther, Jr. et al. (US 4,652,177) and Sholl et al. (US 4,846,357). Regarding claim 58, Crake discloses a barge-type drilling platform. The vessel comprises a hull having a bow, stern, port side panel, starboard side panel, and periphery. Each side panel has a vertically extending opening at recess (17). The vessel comprises a plurality of legs (16) that are attached to the hull and vertically moveable relative to the hull. Each leg has a pad (15) attached thereto. Each leg has a hydraulic jacking mechanism (19) that creates the vertical movement. There are two legs next to the bow and two legs closer to the stern. The hull has recesses (17) that the pads are disposed in when the legs are lifted to the uppermost position. Crake shows one embodiment, figure 7, where the pads extend laterally beyond the hull perimeter through the vertical opening of recess (17). Each recess has a front opening that is located in a plane coincident with the bottom of the hull near the forward most end of the recess. This front opening can communicate with

the vertical side opening. Crake does not disclose that the vessel is self propelled.

Gunther shows a boat similar to that of Crake. The Gunther boat has vertically extendable legs attached to the hull with a pad attached to each leg. Gunther, however, teaches that the boat can be self propelled. The skilled artisan would recognize that self propulsion would eliminating the need for an extra tow vessel. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Crake by providing the vessel with a propeller.

14. Still regarding claim 58, Crake shows four legs that appear to be equidistant from the hull longitudinal centerline. Gunther and Sholl both show that a lift boat can be provided with a single leg at the stern behind the engine room. The skilled artisan will recognize that using one stern leg instead of two would reduce the cost of producing and maintaining the boat by reducing the number of moving parts. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the invention of Crake by replacing the two stern legs with one stern leg located behind the engine room as taught by Gunther and Sholl.

15. Regarding claim 60, it can be seen from the figures of Crake and Sholl that each pad is roughly the same size.

16. Regarding claim 63, Crake shows the pads are below the waterline when in the uppermost position.

17. Regarding claims 62 and 65, Crake discloses that the pads are buoyant. As such, they will necessarily contribute to the aggregate buoyancy of the hull when in the

recessed position. It is known to use this type of vessel in salt water, and therefore would be obvious to make the pads buoyant in salt water.

18. Regarding claim 67, Gunther teaches self-propelled. It is known to use propellers for providing propulsion to boats, and therefore would have been obvious to use a propeller on the modified invention of Crake.

19. Claims 59 and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crake in view of Gunther and Sholl as applied to claim 58 above, and further in view of Buckley et al. (US 2,308,743) and Nunley (US 5,190,410). Regarding claim 59, Crake discloses a pad size such that the total surface area of the pads is less than 30% of the deck area. Bulkley discloses a different total pad surface area that is also less than 30% of the deck area. Bulkley teaches in lines 39-42 that the pad size may be increased in accordance with the load to be supported. It is well known in the art to have pads of all sizes, ranging from a spike-ended spud to a pad that is larger than the deck area as shown by Nunley. Based upon the teaching of Bulkley and the disclosure of Nunley, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the vessel of Crake by making the pads of a size such that the total pad surface area was greater than 30% of the deck area. The motivation would be to construct the pads in accordance with an anticipated load that would require more support area.

20. Regarding claim 61, from the teaching of Bulkley, one skilled in the art would be motivated to size the pads in accordance with the load to be supported. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention

was made to further modify the vessel of Crake by making the pads of a size such that the pads exert a pressure of less than 7 p.s.i. on the sea floor. The motivation would be to construct the pads to optimize design parameters such as strength-to-weight ratio of the legs and pads and size of the pads.

Allowable Subject Matter

21. Claims 68 and 70 are allowed.

Conclusion

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Long et al. (2,942,425) shows a self-propelled vessel with a hull and multiple jack-up legs.

23. Any inquiry concerning this communication should be directed to examiner Andrew D. Wright at telephone number (703) 308-6841. The examiner can normally be reached Monday-Friday from 9:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, S. Joe Morano, can be reached at (703) 308-0230. The fax number for official communications is 703-872-9306. The fax number directly to the examiner for unofficial communications is 703-746-3548.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Application/Control Number: 10/801,978
Art Unit: 3617

Page 10

Status information for unpublished applications is available through Private PAIR only.
For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should
you have questions on access to the Private PAIR system, contact the Electronic
Business Center (EBC) at 866-217-9197 (toll-free).

Andrew D. Wright
Patent Examiner
Art Unit 3617

Am 11/23/07
ANDREW D. WRIGHT
PRIMARY EXAMINER